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Joint Polar Satellite System (JPSS) Ground Project
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Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirement Specification (SRS) for the Ozone Nadir Profile

Block 2.0.0

National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland

Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirement Specification (SRS) for the Ozone Nadir Profile
JPSS Review/Approval Page

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Goddard Space Flight Center
Greenbelt, Maryland

Preface

This document is under JPSS Ground Project configuration control. Once this document is approved, JPSS approved changes are handled in accordance with Class I and Class II change control requirements as described in the JPSS Configuration Management Procedures, and changes to this document shall be made by complete revision.

Any questions should be addressed to:

JPSS Configuration Management Office
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Change History Log

Revision	Effective Date	Description of Changes (Reference the CCR & CCB/ERB Approve Date)
Rev-	Aug. 29, 2013	This version incorporates 474-CCR-13-1183 which was approved by JPSS Ground ERB on the effective date shown.
A	Jan 16, 2014	This version incorporates 474-CCR-13-1430 which was approved by JPSS Ground ERB on the effective date shown.
A1	Oct 23, 2014	This version incorporates 474-CCR-14-2091 which was approved by the JPSS Ground ERB for CO10 on the effective date shown.
B	Jan 07, 2015	This version incorporates 474-CCR-14-1721, 474-CCR-14-1741, 474-CCR-14-1781, 474-CCR-14-1793, 474-CCR-14-2110 and 474-CCR-14-2178 which was approved by JPSS Ground ERB on the effective date shown.
C	Apr 08, 2016	This version incorporates 474-CCR-15-2452, 474-CCR-15-2480, 474-CCR-15-2657, 474-CCR-16-2850 and 474-CCR-16-2833 which was approved by JPSS Ground ERB on the effective date shown.
0200D	Sep 22, 2016	This version incorporates 474-CCR-16-2939 and 474-CCR-16-3049 which was approved by JPSS Ground ERB on the effective date shown.

List of Waivers

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
3.1.1 / SRS.01.22_224	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_225	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_226	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_227	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_228	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_229	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_230	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_231	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data	JPSS-1 JPSS-2

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				Record (EDR) for JPSS-1 mission and beyond	
3.1.1 / SRS.01.22_232	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_233	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_234	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.22_235	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.22_268	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.22_277	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_211	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_212	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data	JPSS-1 JPSS-2

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				Record (EDR) for JPSS-1 mission and beyond	
3.2.2 / SRS.01.22_213	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_214	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_215	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_216	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_217	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_218	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_219	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.22_274	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data	JPSS-1 JPSS-2

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				Record (EDR) for JPSS-1 mission and beyond	
3.2.3 / SRS.01.22_220	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.3 / SRS.01.22_271	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.1 / SRS.01.22_278	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.1 / SRS.01.22_279	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.1 / SRS.01.22_282	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.22_221	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.22_272	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.22_222	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data	JPSS-1 JPSS-2

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				Record (EDR) for JPSS-1 mission and beyond	
3.3.2 / SRS.01.22_273	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.6 / SRS.01.22_236	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.7 / SRS.01.22_223	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.12 / SRS.01.22_210	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.12 / SRS.01.22_275	NJO-2016-007	04/05/2016	474-CCR-16-2850	Waiver for Ozone Nadir Profile (NP) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2

Table of TBDs/TBRs

TBx	Type	ID	Text	Action
None				

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1 Introduction

The Joint Polar Satellite System (JPSS) is the National Oceanic and Atmospheric Administration's (NOAA) next-generation operational Earth observation program that acquires and distributes global environmental data primarily from multiple polar-orbiting satellites. The program plays a critical role in NOAA's mission to understand and predict changes in weather, climate, oceans and coasts, and the space environment, which support the Nation's economy and protect lives and property. The first JPSS satellite mission, the Suomi National Polar-orbiting Partnership (S-NPP) satellite, successfully launched in October 2011. S-NPP, along with the legacy NOAA Polar Operational Environmental Satellites (POES), provides continuous environmental observations. Two JPSS satellites will follow S-NPP: JPSS-1, planned for launch in fiscal year (FY) 2017, with JPSS-2 to follow in FY2021. In the future, the JPSS Polar Follow-On (PFO) provides for two additional missions, JPSS-3 and JPSS-4, as follow-on to the JPSS-2 mission to extend the JPSS Program lifecycle out to 2038.

In addition to the JPSS Program's own satellites operating in the 1330 (±10) Local Time of the Ascending Node (LTAN) orbit, NOAA also leverages mission partner assets for complete global coverage. These partner assets include the Department of Defense (DoD) Defense Meteorological Satellite Program (DMSP) operational weather satellites (in the 1730 - 1930 LTAN orbit), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) Meteorological Operational (Metop) satellites (in the 2130 LTAN orbit) and the Japanese Aerospace Exploration Agency (JAXA) Global Change Observation Mission-Water (GCOM-W) satellite (in the 1330 LTAN orbit). JPSS routes Metop data from McMurdo Station, Antarctica to the EUMETSAT facility in Darmstadt, Germany and EUMETSAT, in turn, provides Metop data to NOAA. For GCOM, JPSS routes the GCOM-W data from Svalbard, Norway to the NOAA Satellite Operations Facility (NSOF) in Suitland, MD, processes GCOM-W data and delivers GCOM-W products to the JPSS users who have JAXA permissions.

Additionally, the JPSS Program provides data acquisition and routing support to the DMSP and the WindSat Coriolis Program. JPSS routes DMSP data from McMurdo Station to the 557th Weather Wing at Offutt Air Force Base in Omaha, NE. After processing, the 557th releases the DMSP data for public consumption over the Internet via the National Geophysical Data Center in Boulder, CO. The JPSS Program provides data routing support to the National Science Foundation (NSF), as well as the National Aeronautics and Space Administration (NASA) Space Communications and Navigation (SCaN)-supported missions, which include the Earth Observing System (EOS). As part of the agreements for the use of McMurdo Station, JPSS provides communications/network services for the NSF between McMurdo Station, Antarctica and Centennial, Colorado.

As a multi-mission ground infrastructure, the JPSS Ground System supports the heterogeneous constellation of the before-mentioned polar-orbiting satellites both within and outside the JPSS Program through a comprehensive set of services as listed in Table 1-1.

Table: 1-1 JPSS Ground System Services

Service	Description
Enterprise Management and Ground Operations	Provides mission management, mission operations, ground operations, contingency management and system sustainment
Flight Operations	Provides launch support and early orbit operations, telemetry and commanding, orbital operations, mission data playback, payload support, flight software upgrade, flight vehicle simulation, and disposal at the end of mission life
Data Acquisition	Provides space/ground communications for acquiring mission data
Data Routing	Provides routing of telemetry, mission and/or operations data through JPSS' global data network
Data Product Generation	Provides the processing of mission data to generate and distribute raw, sensor, environmental, and ancillary data products
Data Product Calibration and Validation	Provides calibration and validation of the data products
Field Terminal Support	Provides development and operational support to the Field Terminal customers

1.1 Identification

This SRS provides requirements for the ozone nadir profile retrieval EDR.

1.2 Algorithm Overview

The algorithm calculates a vertical ozone abundance profile at nadir, at a series of atmospheric pressure levels, from the ozone nadir profile SDR radiances.

1.3 Document Overview

Section	Description
Section 1	Introduction - Provides a brief overview of the JPSS Ground System and the relevant algorithm, as reference material only.
Section 2	Related Documentation - Lists related documents and identifies them as Parent, Applicable, or Information Documents such as, MOAs, MOUs, technical implementation agreements, as well as Data Format specifications. This section also establishes an order of precedence in the event of conflict between two or more documents.
Section 3	Algorithm Requirements - Provides a summary of the science requirements for the products covered by this volume.
Appendix A	Requirements Attributes - Provides the mapping of requirements to verification methodology and attributes.

2 Related Documentation

The latest JPSS documents can be obtained from URL: https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm. JPSS Project documents have a document number starting with 470, 472 or 474 indicating the governing Configuration Control Board (CCB) (Program, Flight, or Ground) that has the control authority of the document.

2.1 Parent Documents

The following reference document(s) is (are) the Parent Document(s) from which this document has been derived. Any modification to a Parent Document will be reviewed to identify the impact upon this document. In the event of a conflict between a Parent Document and the content of this document, the JPSS Program Configuration Change Board has the final authority for conflict resolution.

Doc. No.	Document Title
470-00067	Joint Polar Satellite System (JPSS) Ground System Requirements Document (GSRD)
470-00067-02	Joint Polar Satellite System (JPSS) Ground System Requirements Document (GSRD), Volume 2 - Science Product Specification
474-00448-01	Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirements Specification (SRS) for the Common Algorithms

2.2 Applicable Documents

The following document(s) is (are) the Applicable Document(s) from which this document has been derived. Any modification to an Applicable Document will be reviewed to identify the impact upon this document. In the event of conflict between an Applicable Document and the content of this document, the JPSS Program Configuration Change Board has the final authority for conflict resolution.

Doc. No.	Document Title
D0001-M01-S01-005	Joint Polar Satellite System (JPSS) OMPS Nadir Profile Ozone Algorithm Theoretical Basis Document (ATBD)
474-00448-02-22	Joint Polar Satellite System (JPSS) Algorithm Specification Volume II: Data Dictionary for the Ozone Nadir Profile EDR
474-00448-04-22	Joint Polar Satellite System (JPSS) Algorithm Specification Volume IV: Software Requirements Specification Parameter File (SRSPF) for the Ozone Nadir Profile EDR

2.3 Information Documents

The following documents are referenced herein and amplify or clarify the information presented in this document. These documents are not binding on the content of this document.

Doc. No.	Document Title
474-00333	Joint Polar Satellite System (JPSS) Ground System (GS) Architecture Description Document (ADD)
474-00054	Joint Polar Satellite System (JPSS) Ground System (GS) Concept of Operations (ConOps)
470-00041	Joint Polar Satellite System (JPSS) Program Lexicon

Doc. No.	Document Title
474-00448-03-22	Joint Polar Satellite System (JPSS) Algorithm Specification Volume III: Operational Algorithm Description (OAD) for the Ozone Nadir Profile EDR
429-05-02-42	Joint Polar Satellite System (JPSS) Mission Data Format Control Book for NPP
472-00251	Joint Polar Satellite System (JPSS) Mission Data Format Control Book for JPSS-1

3 Algorithm Requirements

3.1 States and Modes

3.1.1 Normal Mode Performance

Not applicable.

SRS.01.22_224 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 20% or 0.1 ppmv (parts per million by volume) for pressures greater than 30 hPa (hectoPascal).

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents. The Ozone Nadir Profile is an IP in the S-NPP mission. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_225 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 10% or 0.1 ppmv for pressures at 30 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents**.** The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_226 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of between 5% and 10% for pressures from 30 to 1 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_227 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 10% or 0.1 ppmv for pressures less than 1 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_228 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures greater than 30 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_229 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy between 5% and 10% for pressures from 1 to 30 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_230 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures at 1 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_231 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures less than 1 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1

mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_232 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile for concentrations between 0.1 and 15 ppmv.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement range was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_233 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size of 20 km for pressures greater than 30 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The vertical cell size was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_234 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size between 7 km and 10 km for pressures from 1 to 30 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I:

SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The vertical cell size was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.22_235 The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size of 20 km for pressures less than 1 hPa.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The vertical cell size was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

3.1.2 Graceful Degradation Mode Performance

SRS.01.22_268 The Ozone Nadir Profile software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.22_277 The Ozone Nadir Profile software shall use TUG87 Surface Pressure [OMPS NP Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast input are not available.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

3.2 Algorithm Functional Requirements

3.2.1 Product Production Requirements

Not applicable.

3.2.2 Algorithm Science Requirements

SRS.01.22_211 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone profiles in terms of SBUV/2 standard pressure layers.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_212 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone profiles in terms of mixing ratios.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0

production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_213 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone column amounts.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_214 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for sulfur dioxide.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with D0001-M01-S01-005, ATBD for OMPS Nadir Profile Ozone

Mission Effectivity: S-NPP

SRS.01.22_215 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for normalized earth view radiances.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0

production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_216 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for reporting total ozone pair retrieval parameters.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_217 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for calibration parameters reported in the product.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_218 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for reflectivity.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0

production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_219 The Ozone Nadir Profile software shall incorporate a computing algorithm provided for quality description.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

SRS.01.22_274 The Nadir Profile Averaging Kernels IP software shall incorporate a computing algorithm provided for averaging kernel values.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the JPSS OMPS Nadir Profile Ozone ATBD (D0001-M01-S01-005).

Mission Effectivity: S-NPP

3.2.3 Algorithm Exception Handling

SRS.01.22_220 The Ozone Nadir Profile EDR software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-01-22) <NP_EDR> <fill>.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the

suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its computing algorithm must fill the Ozone Nadir Profile IP values based on the established fill conditions to satisfy exclusion and fill conditions.

Mission Effectivity: S-NPP

SRS.01.22_271 The Nadir Profile Averaging Kernels IP software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-01-22) <NP_Averaging_Kernels_IP> <fill>.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The IP software through its computing algorithm must fill the NP Averaging Kernels IP values based on the established fill conditions to satisfy exclusion and fill conditions.

Mission Effectivity: S-NPP

3.3 External Interfaces

3.3.1 Inputs

SRS.01.22_278 The Ozone Nadir Profile software shall incorporate inputs per Table 3-1.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR generation software must be able to receive and process the resource interaction items shown in Table 3-1 in order to produce the intended Ozone Nadir Profile EDR products.

Mission Effectivity: S-NPP

SRS.01.22_279 The Nadir Profile Averaging Kernel IP software shall incorporate inputs per Table 3-1.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The IP generation software must be able to receive and process the resource interaction items shown in Table 3-1 in order to produce the intended Nadir Profile Averaging Kernel IP products.

Mission Effectivity: S-NPP

SRS.01.22_282 The Ozone Nadir Profile EDR software shall ingest tables and coefficients formatted in accordance with Section 7 of the JPSS Algorithm Specification Vol II: Data Dictionary for Ozone Nadir Profile (474-00448-02-22).

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: This defines the formats for Lookup Tables, and Processing Coefficients for input into the algorithm module.

Mission Effectivity: S-NPP

Table 3-1 and Figure 3-1 are best viewed together since they describe the processes governed by this SRS in different ways. The figure diagrams the data flowing into, out of, and within the code governed by this SRS. The table lists these same data interactions as well as all downstream dependencies for outputs from this SRS.

Each row in the table describes a single software interaction - data flowing from one software item to another. The data is listed in the first column. The second and third columns include the collection short names and mnemonic for the data. Blanks indicate there is no mnemonic. The fourth and fifth columns contain the SRS that generates the data product(s) in the first column, and the SRS that receives those products. The final two columns contain the actual function name in Algorithm Development Library (ADL) that produces those products, and the function that inputs those products. The SRS's titled "Ingest MSD" and "Store/Retrieve" are non-existent SRS's functioning as data handling for the IDPS. The software functions "Store Products" and "Retrieve Products" are similar non-existent functions that operate as IDPS data handling.

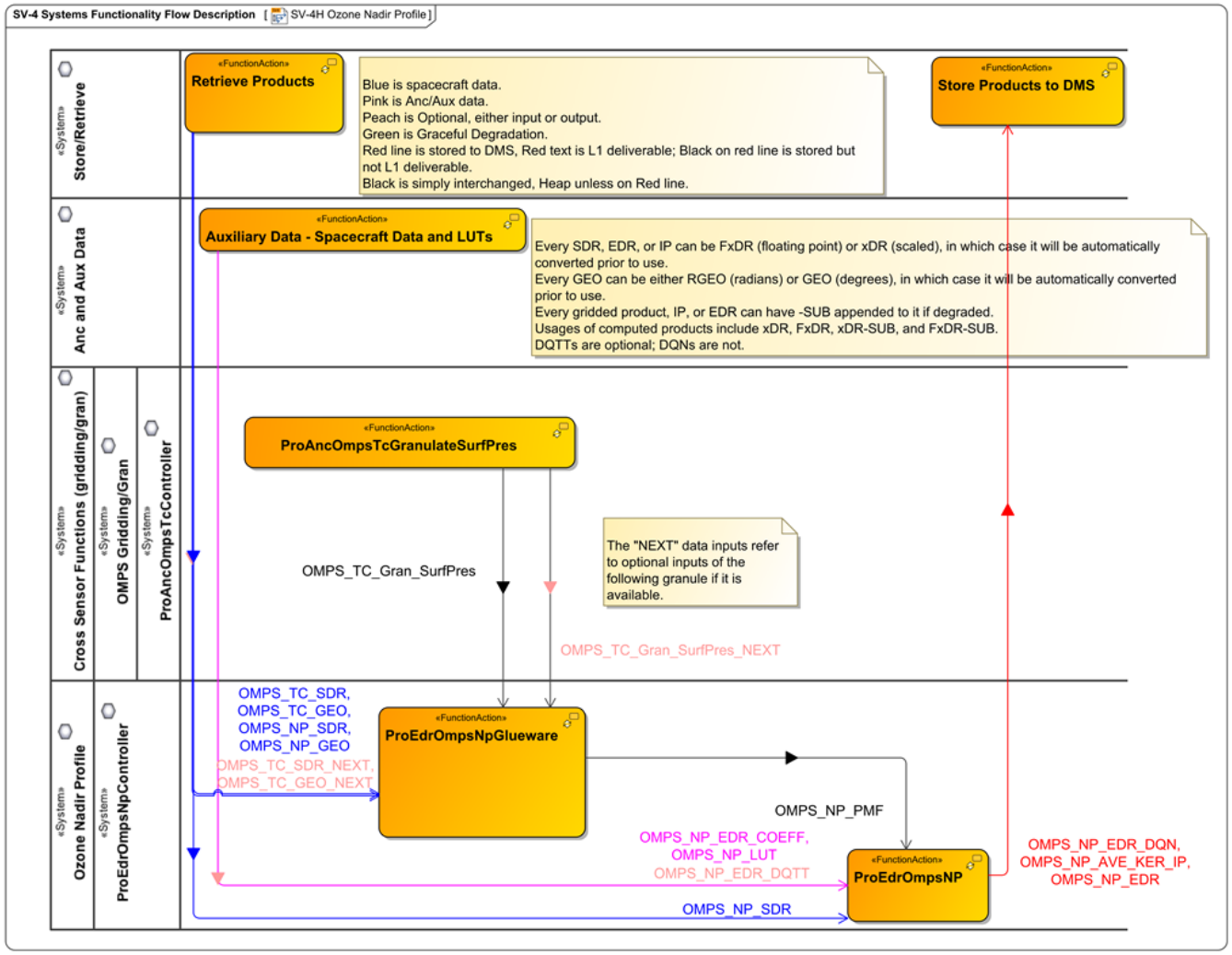

Figure: 3-1 Ozone Nadir Profile Data Flows

Table: 3-1 Systems Resource Flow Matrix: Ozone Nadir Profile

Data Product Name	Collection Short Name	Mnemonic	Sending SRS	Receiving SRS	Sending Function	Receiving Function
•OMPS_TC_SDR •OMPS_TC_GEO •OMPS_NP_SDR •OMPS_NP_GEO	•OMPS-TC-SDR •OMPS-TC-GEO •OMPS-NP-SDR •OMPS-NP-GEO	•SDRE-OMTC-C0030 •None •SDRE-OMPS-C0030 •None	Store/Retrieve (OMPS TC and NP SDRs)	OMPS Nadir Profile	Retrieve Products	ProEdrOmpsNpGluewa re
•OMPS_TC_SDR_NEXT •OMPS_TC_GEO_NEXT	•OMPS-TC-SDR •OMPS-TC-GEO	•SDRE-OMTC-C0030 •None	Store/Retrieve (OMPS TC SDR)	Ozone Nadir Profile	Retrieve Products	ProEdrOmpsNpGluewa re
•OMPS_TC_Gran_SurfPres_NEXT	•OMPS-TC-ANC-Press-Surf-Gran	•None		Ozone Nadir Profile	ProAncOmpsTcGranulateSurfPres	ProEdrOmpsNpGluewa re
•OMPS_TC_Gran_SurfPres	•OMPS-TC-ANC-Press-Surf-Gran	•None	Grid Gran	Ozone Nadir Profile	ProAncOmpsTcGranulateSurfPres	ProEdrOmpsNpGluewa re
•OMPS_NP_SDR	•OMPS-NP-SDR	•SDRE-OMPS-C0030	Store/Retrieve (OMPS NP SDR)	Ozone Nadir Profile	Retrieve Products	ProEdrOmpsNP
•OMPS_NP_EDR_COEFF •OMPS_NP_LUT	•OMPS-NP-EDR-AC •OMPS-NP-LUT	• DP_NU-LM2020-008 •NP_NU-LM0240-126	Anc and Aux Data	Ozone Nadir Profile	Auxiliary Data - Spacecraft Data and LUTs	ProEdrOmpsNP
•OMPS_NP_EDR_DQTT	•OMPS-NP-EDR-DQTT	•DP_NU-LM2030-000	Anc and Aux Data		Auxiliary Data - Spacecraft Data and LUTs	ProEdrOmpsNP
•OMPS_NP_PMF	•OMPS-NP-PMF	•None	Ozone Nadir Profile	Ozone Nadir Profile	ProEdrOmpsNpGluewa re	ProEdrOmpsNP
•OMPS_NP_EDR_DQN •OMPS_NP_AVE_KER_IP •OMPS_NP_EDR	•OMPS-NP-EDR-DQN •OMPS-NP-Ave-Ker-IP • OMPS-NP-EDR	•DP_NU-L00090-001 •IMPI_NPAK_R0100 • EDRE-NAOP-C0030	Ozone Nadir Profile	Store/Retrieve	ProEdrOmpsNP	Store Products to DMS

3.3.2 Outputs

SRS.01.22_221 The Ozone Nadir Profile software shall generate the Ozone Nadir Profile EDR product in conformance with the XML format file in Attachment A.1 of the JPSS Algorithm Specification, Vol II: Data Dictionary for Ozone Nadir Profile (474-00448-02-22).

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product profile must conform to the XML format file.

Mission Effectivity: S-NPP

SRS.01.22_272 The Nadir Profile Averaging Kernels IP software shall generate the Ozone Nadir Profile IP product in conformance with the XML format file in Attachment A.2 of the JPSS Algorithm Specification, Vol II: Data Dictionary for Ozone Nadir Profile (474-00448-02-22).

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product profile must conform to the XML format file.

Mission Effectivity: S-NPP

SRS.01.22_222 The Ozone Nadir Profile software shall use the geolocation for the OMPS Nadir Profile Science SDR.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product must be associated with the geolocation products.

Mission Effectivity: S-NPP

SRS.01.22_273 The Nadir Profile Averaging Kernels IP software shall use the geolocation for the OMPS Nadir Profile Science SDR.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product must be associated with the geolocation to meet the geolocation accuracy requirement.

Mission Effectivity: S-NPP

3.4 Science Standards

Not applicable.

3.5 Metadata Output

Not applicable.

3.6 Quality Flag Content Requirements

SRS.01.22_236 The Ozone Nadir Profile software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-04-22) <NP_EDR><QF>.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Quality Flags must be generated based on the established flag conditions, logic, and format.

Mission Effectivity: S-NPP

3.7 Data Quality Notification Requirements

SRS.01.22_223 The Ozone Nadir Profile software shall send data quality notifications to the operator according to logic specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-04-22) <NP_EDR><Notifications>.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Notifications must be generated and sent based on the established logic and conditions.

Mission Effectivity: S-NPP

3.8 Adaptation

Not applicable.

3.9 Provenance Requirements

Not applicable.

3.10 Computer Software Requirements

Not applicable.

3.11 Software Quality Characteristics

Not applicable.

3.12 Design and Implementation Constraints

SRS.01.22_210 The JPSS Common Ground System shall execute the nadir profile ozone product algorithms.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The CGS needs to incorporate algorithm changes that are supplied by the algorithm vendor.

Mission Effectivity: S-NPP

SRS.01.22_275 The JPSS Common Ground System shall execute the nadir profile averaging kernels product algorithms.

Waiver **474-CCR-16-2850**: Suppress IDPS B2.0 production of Ozone NP EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone NP (474-00448-01-22) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS NP AP, RDR, SDR, and Ozone NP EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS NP AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone NP EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The CGS must incorporate algorithm changes that are supplied by the algorithm vendor.

Mission Effectivity: S-NPP

3.13 Personnel Related Requirements

Not applicable.

3.14 Training Requirements

Not applicable.

3.15 Logistics Related requirements

Not applicable.

3.16 Other Requirements

Not applicable.

3.17 Packaging Requirements

Not applicable.

3.18 Precedence and Criticality

Not applicable.

Appendix A. Requirements Attributes

The Requirements Attributes Table lists each requirement with CM-controlled attributes including requirement type, mission effectivity, requirement allocation(s), block start and end, method(s) for verifying each requirement, etc.

Req ID	SRS 22 - Ozone Nadir Profile	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM	Block 2.2.0 VM
SRS.01.22_224	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 20% or 0.1 ppmv (parts per million by volume) for pressures greater than 30 hPa (hectoPascal).	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_225	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 10% or 0.1 ppmv for pressures at 30 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_226	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of between 5% and 10% for pressures from 30 to 1 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_227	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement precision of the greater of 10% or 0.1 ppmv for pressures less than 1 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_228	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures greater than 30 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_229	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy between 5% and 10% for pressures from 1 to 30 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA

Req ID	SRS 22 - Ozone Nadir Profile	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM	Block 2.2.0 VM
SRS.01.22_230	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures at 1 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_231	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a measurement accuracy of the greater of 10% or 0.1 ppmv for pressures less than 1 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_232	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile for concentrations between 0.1 and 15 ppmv.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_233	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size of 20 km for pressures greater than 30 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_234	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size between 7 km and 10 km for pressures from 1 to 30 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_235	The Ozone Nadir Profile EDR algorithm shall calculate the ozone nadir profile with a vertical cell size of 20 km for pressures less than 1 hPa.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA	NA
SRS.01.22_268	The Ozone Nadir Profile software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_277	The Ozone Nadir Profile software shall use TUG87 Surface Pressure [OMPS NP Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast input are not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA

Req ID	SRS 22 - Ozone Nadir Profile	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM	Block 2.2.0 VM
SRS.01.22_211	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone profiles in terms of SBUV/2 standard pressure layers.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_212	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone profiles in terms of mixing ratios.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_213	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for ozone column amounts.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_214	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for sulfur dioxide.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_215	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for normalized earth view radiances.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_216	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for reporting total ozone pair retrieval parameters.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_217	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for calibration parameters reported in the product.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_218	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for reflectivity.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_219	The Ozone Nadir Profile software shall incorporate a computing algorithm provided for quality description.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_274	The Nadir Profile Averaging Kernels IP software shall incorporate a computing algorithm provided for averaging kernel values.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA	NA

Req ID	SRS 22 - Ozone Nadir Profile	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM	Block 2.2.0 VM
SRS.01.22_220	The Ozone Nadir Profile EDR software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-01-22) <NP_EDR> <fill>.	E	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_271	The Nadir Profile Averaging Kernels IP software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-01-22) <NP_Averaging_Kernels_IP> <fill>.	E	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_278	The Ozone Nadir Profile software shall incorporate inputs per Table 3-1.	I	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_279	The Nadir Profile Averaging Kernel IP software shall incorporate inputs per Table 3-1.	I	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_282	The Ozone Nadir Profile EDR software shall ingest tables and coefficients formatted in accordance with Section 7 of the JPSS Algorithm Specification Vol II: Data Dictionary for Ozone Nadir Profile (474-00448-02-22).	Ft	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_221	The Ozone Nadir Profile software shall generate the Ozone Nadir Profile EDR product in conformance with the XML format file in Attachment A.1 of the JPSS Algorithm Specification, Vol II: Data Dictionary for Ozone Nadir Profile (474-00448-02-22).	F	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_272	The Nadir Profile Averaging Kernels IP software shall generate the Ozone Nadir Profile IP product in conformance with the XML format file in Attachment A.2 of the JPSS Algorithm Specification, Vol II:	F	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA

Req ID	SRS 22 - Ozone Nadir Profile	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM	Block 2.2.0 VM
	Data Dictionary for Ozone Nadir Profile (474-00448-02-22).									
SRS.01.22_222	The Ozone Nadir Profile software shall use the geolocation for the OMPS Nadir Profile Science SDR.	Fg	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_273	The Nadir Profile Averaging Kernels IP software shall use the geolocation for the OMPS Nadir Profile Science SDR.	Fg	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection		NA
SRS.01.22_236	The Ozone Nadir Profile software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-04-22) <NP_EDR><QF>.	Q	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_223	The Ozone Nadir Profile software shall send data quality notifications to the operator according to logic specified in the JPSS Algorithm Specification, Vol IV: SRSPF for Ozone Nadir Profile (474-00448-04-22) <NP_EDR><Notifications>.	N	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_210	The JPSS Common Ground System shall execute the nadir profile ozone product algorithms.	Ai	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA	NA
SRS.01.22_275	The JPSS Common Ground System shall execute the nadir profile averaging kernels product algorithms.	Ai	IP	S-NPP	CGS	2.0.0	3.0.0	Test	NA	NA